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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,348	05/23/2001	Gregory W. Haggquist	TI-1	4568
1473	7590	01/12/2005	EXAMINER	
FISH & NEAVE IP GROUP ROPES & GRAY LLP 1251 AVENUE OF THE AMERICAS FL C3 NEW YORK, NY 10020-1105			PARKER, FREDERICK JOHN	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/864,348		HAGGQUIST ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Fr derick J. Parker		1762	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 December 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20-37,39-44,47 and 48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-37,39-44,47 and 48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12-3-04</u> . | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Response to Amendment***

#### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 12-3-04 was in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 20,29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- The claims are vague and indefinite because they fail to state the intended activity (catalysis, energy conversion, bioactivity, gas absorption, reflectivity, etc) required to have the particulates be "active".

#### ***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 20-21,23-32,35-37,42-44,47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goller et al US 4175055 in view of Hillrichs et al US 5766443.

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Goller et al and Hillrichs et are cited for the same reasons previously discussed in the last Office Action, which are incorporated herein, and as below.

Applicants arguments and amendments have been fully considered.

Applicants repeatedly assert on pages 12, 14,15, and 17 that both references cited “fail or suggest incorporating active particulates”. The Examiner strongly disagrees with this assertion. Given col. 3, 24-58, the skilled artisan would have recognized that the polymer powder is actively hydrophobic; that the carbons cited are electrically conductive and therefore electrically active as well as inherently absorbent; and the precatalyzed carbon would be catalytically active in the electrode environment. Contrary to Applicants assertion on page 15, Applicants claims never state WHAT activity is intended, and further since the carbons of Goller inherently possess high absorptivity, they ARE active even at time of emplacement and/or fixation. Since Applicants fail to claim WHAT activity of the particulate is intended, and Goller et al clearly and explicitly teaches active particulates, the arguments are not persuasive.

On page 13 last paragraph, Applicants argue aspects of Hillrichs et al for which the reference was never presented. Applicants fail to dispute that Hillrichs teaches making a similar electrochemical electrode using “a porous carbon woven fabric”, the reason the Examiner introduced the secondary reference. Thus Applicants spurious arguments are not persuasive.

Applicants bring up the amended claim 20 includes a limitation that the particulates are fixed so as not to result in a substantial loss of activity. Both Goller et al in view of Hillrichs and Applicants thermally fix the particles, and both achieve fabrics with “activity” Thus the Examiner cannot discern any patentability based upon the added limitation. Further, the prior art references NEVER observe or suggest deactivation of the particles in making a useful end-

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product. As claimed, applicants' process is the same as that of Goller in view of Hillrichs, and hence the outcome of the product would have been expected to be comparable. The Applicants simply fail to point out how the process is patentably different from that of the references.

Applicants argue the sintering step of Goller would prevent a woven material with particulates therein from maintaining original properties. This argument is not persuasive because it would clearly be dependant both upon the particulate loading, the type of polymer binder particle used (see col. 3; col. 5, 45-48; etc), and time at temperature/ atmosphere. Nonetheless Applicants DO thermally fix particles to the weave per claim 35 and specification. The claims fail to address specifics of the process of the claimed fixing/ sintering step and how it would patentably differentiate over that of the prior art.

Thus for all the reasons cited, Applicants arguments are not persuasive, and the rejections of the claims as amended are maintained.

2. Claims 22,33,34,39,41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goller et al US 4175055 in view of Hillrichs et al US 5766443 and further in view of Singh.

Goller et al, Singh, and Hillrichs et are cited for the same reasons previously discussed , which are incorporated herein, and as below.

Applicants arguments and amendments have been fully considered.

Applicants do not argue this rejection separately but rather incorporates all 35 USC 103 rejections collectively. Since the rejection of the previous paragraph above is maintained, the rejection further in view of Singh is maintained for the same reasons.

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3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 571/272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Frederick J. Parker  
Primary Examiner  
Art Unit 1762

fjp